## THE COMMONWEALTH OF MASSACHUSETTS OFFICE OF CONSUMER AFFAIRS AND BUSINESS REGULATION

## **DEPARTMENT OF TELECOMMUNICATIONS & ENERGY**

ONE SOUTH STATION

MITT ROMNEY GOVERNOR

**BOSTON, MA 02110** (617) 305-3500

PAUL G. AFONSO CHAIRMAN

KERRY HEALEY LIEUTENANT GOVERNOR JAMES CONNELLY, ESQ. COMMISSIONER

W. ROBERT KEATING COMMISSIONER

EUGENE J. SULLIVAN, JR. COMMISSIONER

DEIRDRE K. MANNING COMMISSIONER

BETH LINDSTROM

DIRECTOR OFFICE OF CONSUMER AFFAIRS AND BUSINESS REGULATION

August 10, 2004

Werner Schweiger Senior Vice-President, Operations **NSTAR Electric** One NStar Way Westwood, MA 02090

Re: Maintenance and Inspection Practices of Underground Facilities

Dear Mr. Schweiger:

The Department of Telecommunications and Energy (the "Department") is in the process of obtaining from all Massachusetts electric distribution companies information regarding maintenance and inspection practices of underground facilities. The Department has determined that it is necessary to assess distribution company policies and practices in light of recent incidents involving manhole explosions. In order to ensure continued safe and reliable service for customers in the Commonwealth, we find it necessary to review the manner in which companies inspect, evaluate, maintain, and report on their underground electric facilities. In particular, we require information relating to cable and joint failure in underground systems that may pose a safety concern to the public.

Therefore, we require that NSTAR Electric provide the following requested information:

Describe the Company's maintenance and inspection procedures for under 1. ground facilities, including manholes, vaults, and service boxes. Include information on the frequency of maintenance and inspection and attach any checklist. Also, provide information on the status of the Company's maintenance and inspection program.

FAX: (617) 345-9101 TTY: (800) 323-3298

www.mass.gov/dpu

Werner Schweiger

Re: Maintenance and Inspection Practices

August 10, 2004

Page 2 of 2

- 2. Describe the Company's record keeping of underground system events, including for manholes, vaults and service boxes. Please indicate whether the Company tracks and classifies events for manholes, vaults and service boxes, such as by (i) smoke, (ii) fire, and (iii) manhole cover dislodging and explosions.
- 3. Describe any manhole event mitigation strategies and efforts undertaken by the Company to study manhole incidents.
- 4. Indicate whether the Company's maintenance practices include a process to evaluate underground cables and assess their risk of failures, such as due to age, insulation breakdown, joint failures, etc. If yes, please describe how the Company addresses such probable risks and whether it prioritizes these events by degree of severity.
- 5. Identify whether the Company tracks cable and joint failures in a manhole in order to evaluate the risk of future failure.
- 6. Describe the Company's practices for determining the root cause of cable and joint failures. Please indicate whether the root cause analysis includes an evaluation of distribution system relay coordination and short circuit levels.

Please submit to the Department six (6) copies of your response to this request by September 1, 2004. Should you have any questions concerning the information required by the Department, please contact me at 617-305-3658.

Sincerely,

Ronald F. LeComte Director, Electric Power Division

cc: Commission
Mary L. Cottrell, Secretary
Timothy J. Shevlin, Jr., Executive Director
Andrew O. Kaplan, General Counsel
John Cope-Flanagan, Esquire
Ghebre Daniel, Electric Power Division

FAX: (617) 345-9101 TTY: (800) 323-3298